

Application No. 10/777,014
Amendment dated October 31, 2007
After Final Office Action of October 22, 2007

Docket No.: CVRS-P04-001

REMARKS

Claims 47-145 and 147-155 are pending in the application. Claims 63-65, 80-91, 142, and 144-145 have been withdrawn; claims 92-140 and 147 have been cancelled; and claims 47-62, 66-79, 141, 143, and 148-155 remain in the application. Claim 47 has been amended, and may be broader than the previously presented claim in some respects. New claims 156-162 have been added. Support for the new claims can be found throughout the original specification.

Restrictions

Claims 150-155, newly submitted in the Applicant's response of July 30, 2007, were withdrawn from consideration as being directed to a non-elected invention. In particular, the Office Action states that these claims are directed to an invention that is independent or distinct from the invention originally claimed because they do not specify the frequency range of the acoustic field. Applicant respectfully traverses.

The reason given by the Examiner for withdrawing these claims is plainly without merit. A claim that lacks a feature recited in another claim is at best a generic linking claim; it certainly is not directed to a patentably distinct invention. An apparatus according to claims 150-155 may provide a focused acoustic field having a frequency within the range specified by the claims as originally filed, as claims 150-155 do not preclude the use of such a frequency.

Moreover, pursuant to MPEP 806.03, it is plain that restriction should not be required between claim 47 and claim 150. One way claims 47 and 150 differ is in the recitation, in claim 47, of a reaction vessel, as compared to the conduit of claim 150. However, these terms are not mutually exclusive, and therefore single embodiments of the claimed apparatus can possess a reaction vessel/conduit that would fall squarely within both of these terms. Furthermore, claims 47 and 150 differ in the recited function of the recited inlet and outlet – flowing, in claim 47, compared to continuously transporting, in claim 150. These terms are also not mutually exclusive, and thus a single embodiment of the claimed invention can easily be configured to operate in a manner that fits

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within both of these terms simultaneously. Because a single embodiment of the claimed invention can simultaneously satisfy the terms of both claims 47 and 150, their restriction one from the other cannot be required.

For the foregoing reasons, Applicant respectfully requests reconsideration of the withdrawal of claims 150-155. Applicant requests that in the event the withdrawal of any of these claims is maintained, or that new withdrawals of claims are subsequently made, the Examiner clearly set out the different groups being restricted to assist the Office and Applicant in determining the propriety and availability of divisional applications under the rules being implemented by the Office.

Claims 62, 64, 141, 145, 148, and 149 were withdrawn from consideration as being directed to a non-elected invention. In particular, the Office Action states that these claims have been amended, in Applicant's response of July 30, 2007, to encompass a non-elected invention having "a transport and position of a sample vessel," which was not elected in the response of June 27, 2005 and are directed to an invention that is independent or distinct from the originally invented elected. Applicant respectfully traverses.

Applicant notes that claims 62, 64, and 145 were not amended in the response of July 30, 2007. In particular, claim 62 was previously presented and claims 64 and 145 had been withdrawn. Applicant respectfully requests reconsideration of the withdrawal of claim 62 and the new grounds for withdrawal of claims 64 and 145.

Claims 62, 64, 145, 148, and 149 all depend from claim 141, which, like the originally presented claims, recites both a reaction vessel for holding a sample, the reaction vessel including an inlet and an outlet for transporting the sample into and out of, respectively, the reaction vessel, and an acoustic energy source for providing a focused acoustic field, having a frequency of between about 100 kilohertz and about 100 megahertz, to the sample while the sample is in the reaction vessel. As such, the subject matter of claims 141 is connected in design, operation, and effect to the originally claimed invention, and are therefore neither independent nor distinct from the originally claimed invention. In fact, claim 141 differs from claim 47 (prior to the amendments included with

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this response) primarily in that "each of the one or more samples is contained within a sample vessel capable of being transported into the reaction vessel via the at least one inlet and out of the reaction vessel via the at least one outlet." Accordingly, the invention of claim 47, as originally filed, encompasses the invention of claim 141 in that all elements of original claim 47 are recited in claim 141. As such, search and examination of claims 141 and its dependent claims together with the claims previously presented can be made without serious burden. Indeed, a search encompassing the subject matter of claim 141 and its dependent claims is necessary to have examined the claims currently under examination. For the foregoing reasons, Applicant respectfully requests reconsideration of the withdrawal of claims 141 and its dependent claims.

Claim Interpretation

Although Applicants disagree with the Examiner's claim construction analysis, as it is not relevant to the claims as amended and the pending rejections, Applicants will not address these points at this time.

Claim Rejections – 35 U.S.C. § 112

In view of the amendments to claim 47, the rejections of claim 47 and those depending therefrom, namely claims 48-61, 66-79, and 143, under 35 U.S.C. 112, first and second paragraphs, are moot. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections – 35 U.S.C. § 103

Claims 47-49, 51, 52, 66-79, and 143 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 2,585,103 to Fitzgerald in view of U.S. Patent No. 3,614,069 to Murry. Claims 50 and 53-61 are rejected under U.S.C. § 103(a) as being unpatentable over Fitzgerald in view of Murry as applied to claim 47, and further in view of U.S. Patent No. 5,993,671 to Peltzer. Applicants respectfully traverse these rejections to the extent they are maintained over the claims as amended.

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Independent claim 47, as amended herein, is directed to an apparatus for processing one or more samples, which includes, inter alia an acoustic energy source for providing at least one focused acoustic field to the one or more samples, where the focused acoustic field has a focal zone having a diameter of less than about 2 centimeters.

Pursuant to MPEP § 2143.04, "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)."

Fitzgerald discloses generating acoustic energy via a plurality of piezoelectric crystals, without specifying any dimensions of any focal zone that may be generated by the crystals. As such, Fitzgerald does not teach or suggest an acoustic energy source for providing a focused acoustic field having a focal zone having a diameter of less than about 2 centimeters, as recited in claim 47. Murry fails to overcome the deficiencies of Fitzgerald. Murry discloses providing acoustic energy to materials in a tank (e.g., tanks 10, 30, and 50 of Figures 1, 2, and 3, respectively) to cavitate, emulsify, or mix the materials, also without specifying any dimensions of any focal zone that may be generated. As such, Murry does not teach or suggest an acoustic energy source for providing a focused acoustic field having a focal zone having a diameter of less than about 2 centimeters, as recited in claim 47. Peltzer is cited for disclosing a mixing system having a controller for controlling the flow of a sample and sensors for monitoring the state of treatment of the sample. Peltzer, however, does not disclose providing any acoustic fields, and therefore does not overcome any of the deficiencies of Fitzgerald or Murry discussed above.

Thus, these references, whether taken singly or in combination, fail to teach or suggest all the elements of claim 47 as amended, such as a focused acoustic field having a focal zone having a diameter of less than about 2 centimeters. Claims 48-61, 66-79, and 143 depend from claim 47 and are therefore also patentable for at least the reasons that claim 47 is patentable. Therefore, reconsideration and withdrawal of this rejection are respectfully requested.

CONCLUSION

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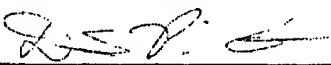
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For the foregoing reasons, Applicant respectfully requests reconsideration and withdrawal of the pending rejections. Applicant believes that the claims are now in condition for allowance and early notification to this effect is earnestly solicited. Any questions arising from this submission may be directed to the undersigned at (617) 951-7000.

Applicant believes no additional fee is due with this response, other than what is reflected on the enclosed transmittal. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. CVRS-P04-001 from which the undersigned is authorized to draw.

Dated: October 31, 2007

Respectfully submitted,

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